3.2 Working through a session

Use the following procedure to work through a tutorial or a workout:

1 Open the Tutorial/Workout screen, as illustrated in Figure 74.

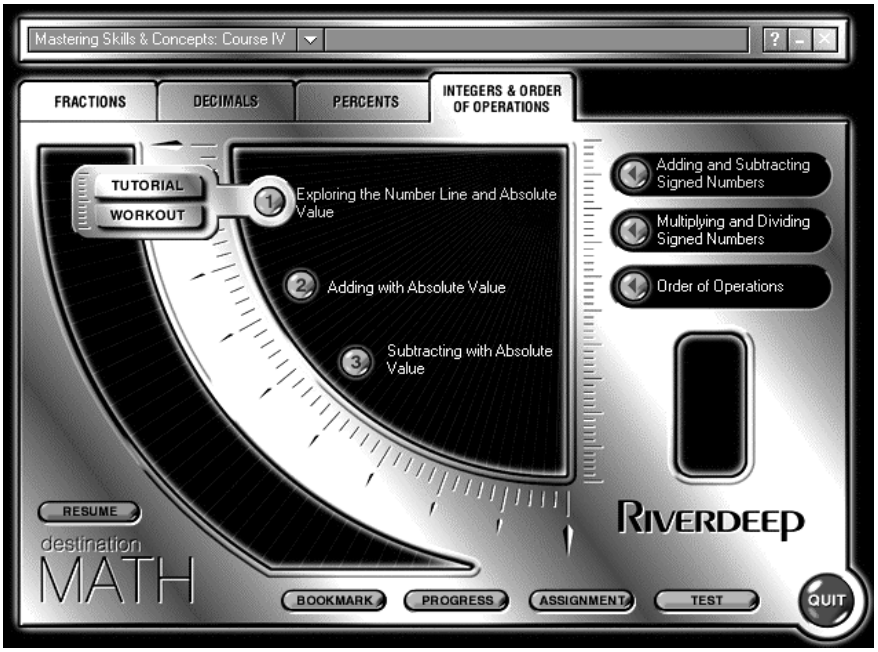


Figure 74 Tutorial/Workout screen

Note: *For details on how to open this screen, see “Using Destination MATH” on Section 1.4 Page 15.*

3.2.1 Tutorial

Use the following procedure to work through a tutorial:

1 Click on the **Tutorial** button from the Tutorial/Workout screen. This will open the Tutorial opening screen, as illustrated in Figure 75.

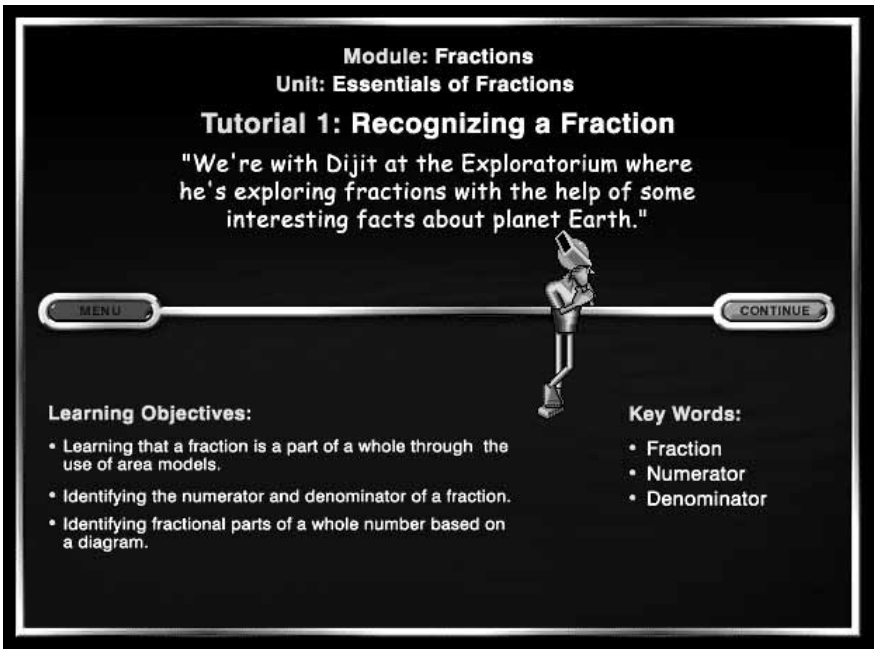

Module: Fractions
Unit: Essentials of Fractions
Tutorial 1: Recognizing a Fraction
"We're with Dijit at the Exploratorium where he's exploring fractions with the help of some interesting facts about planet Earth."
MENU
CONTINUE
Learning Objectives:
• Learning that a fraction is a part of a whole through the use of area models.
• Identifying the numerator and denominator of a fraction.
• Identifying fractional parts of a whole number based on a diagram.
Key Words:
• Fraction
• Numerator
• Denominator

Figure 75 Tutorial opening screen

Note: *For details on using these screens, see “User interface” on Section 3.2.4 Page 16.*

3.2.1.1 Screen display

The following are the items displayed on the opening screen:

MODULE The module title.

UNIT The unit title.

TUTORIAL The title of the chosen tutorial.

LEARNING OBJECTIVES The learning objectives outlining what is to be covered in the tutorial.

KEY WORDS The key words used in the tutorial. The student will see these words used during the working of the tutorial.

MENU Clicking this button will return the student to the main menu screen.

CONTINUE Clicking this button will continue the tutorial.

2 Click the **Continue** button. This will open the first tutorial screen, as illustrated in Figure 76.

Figure 76 Mastering Skills and Concepts tutorial screen

Figure 77 Mastering Algebra tutorial screen

3 Click the **Continue** button to proceed with the tutorial and follow the instructions on the screen and/or given in the narration.

3.2.2 Practice Area

Students have opportunities during tutorials to answer questions in an environment called Practice Area. These are sets of questions that focus on content covered during particular segments of a tutorial. Practice Areas are presented at the conclusion of the screen that presented the mathematical content.

Questions vary in form. Some are multiple choice, others are text entry.

Many of the questions contain a dynamic environment that allows students to investigate properties of the number line and rectangular coordinate plane as they attempt to answer each question.

These dynamic environments include:

- drag a given point to a new position on the number line
- drag a given point to a new position on the rectangular coordinate plane
- drag a given point to a new position on a given line
- rotate and/or translate a given line
- rotate a pair of parallel or perpendicular lines
- rotate and/or translate the boundary line of a linear inequality.

Student performance on Practice Area questions is maintained in the management system as part of the student reporting. This progress report includes how the student responded to each question and if the student accessed the solution and also maintains the report of the best results on each set of questions.

After the last question of the Practice Area set has been answered, a score table is displayed on screen. This table reflects how the student responded to each question: Correct, Incorrect, Not Attempted.

Students may answer the same sets of questions over various sessions as part of the review or remediation activity.

3.2.2.1 Working the Practice Area

Use the following procedure to work the Practice Area:

1 Open a tutorial or workout screen.

2 Click the **Navigation panel** button.

3 Click the **P** button, where available, on the navigation panel.

4 Click the **OK** button, or press the **<Return>** or **<Enter>** key. This will open the Practice Area opening window, as illustrated in Figure 78.

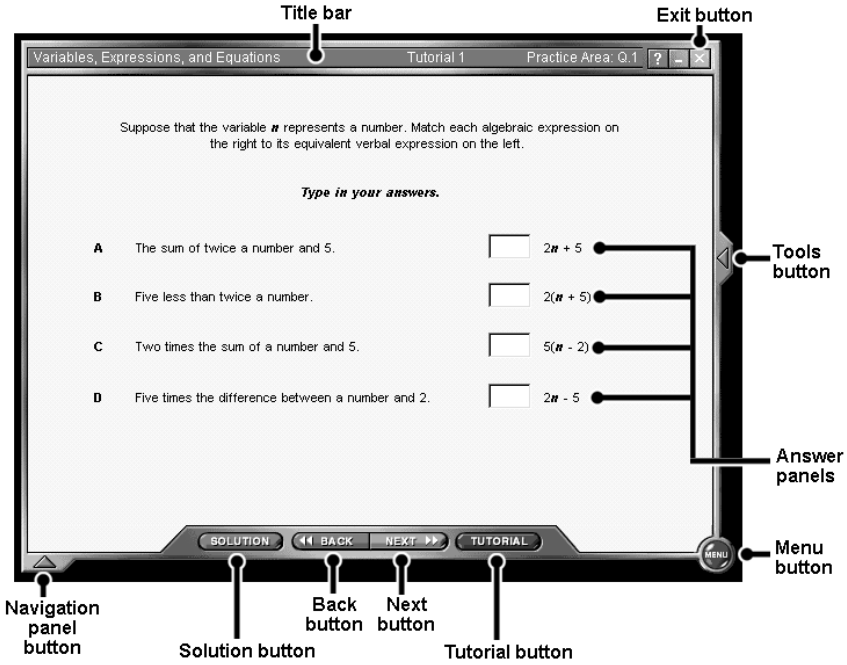


Figure 78 Practice Area opening windo

5 Type in the numbers in the box opposite the question on the screen using the keyboard keys. *(The above window is an example only).*

SCREEN DISPLAY The following items are displayed on the Practice Area screen:

Title bar The title bar contains details of the Practice Area entered. It contains the unit name, the tutorial number and the Practice Area question number.

Exit button This closes the Practice Area screen. When the exit button is clicked the following message appears:

This will return you to the Menu

Click the **OK** button or press the **<Return>** or **<Enter>** key. This will open the Practice Area score window, as illustrated in Figure 79.

Figure 79 Practice Area score window

Click the **OK** button, or press the **<Return>** or **<Enter>** key to return to the menu screen. The Practice Area window shows the number of questions in the Practice Area for a chosen tutorial, the number of the question answered incorrectly, the number of the question answered correctly, and the number of the question not attempted.

Answer box Type your answer into these boxes using the keyboard keys.

When all questions have been attempted, clicking the **Next** button will display the following message:

This will return you to the Tutorial

For details of the remainder of this procedure, see the Exit button item.

Menu button Click this button to return to the menu screen. The following message appears:

This will return you to the Menu

For details of the remainder of this procedure, see the Exit button item.

Tutorial button Click this button to return to the tutorial. The following message appears:

This will return you to the Tutorial

For details of the remainder of this procedure see the Exit button item.

Next button Click this button to proceed to the next question in the Practice Area. Clicking this button at the end of all questions in the Practice Area displays the following message:

This will return you to the Tutorial

For details of the remainder of this procedure, see the Exit button item.

Back button Click this button to go back to the previous question in the Practice Area.

Solution button Click this button to display the correct answer along with a brief solution to the question being posed. This will open the solution window, as illustrated in Figure 80.

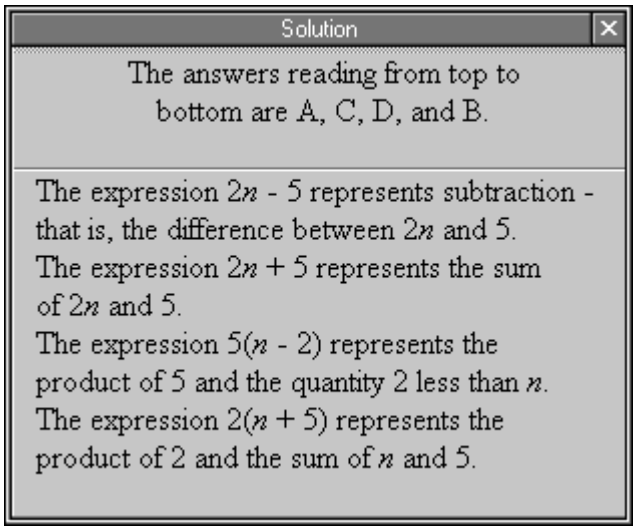

Solution
The answers reading from top to bottom are A, C, D, and B.
The expression 2n - 5 represents subtraction - that is, the difference between 2n and 5.
The expression 2n + 5 represents the sum of 2n and 5.
The expression 5(n - 2) represents the product of 5 and the quantity 2 less than n.
The expression 2(n + 5) represents the product of 2 and the sum of n and 5.

Figure 80 Practice Area solution

Click the **X** button in the top right corner of the solution window, or press the **<Esc>** key. This will return you to the Practice Area window

Note: *Once solutions have been viewed by a student, that specific question can no longer be attempted during the session.*

Navigation panel button Click this button to return to the tutorial screen with the navigation panel open.

3.2.3 Workout

Use the following procedure to work through a workout:

1 Click on the Workout button on the Tutorial/Workout screen. This will open the Workout opening screen, as illustrated in Figure 81 and Figure 82.

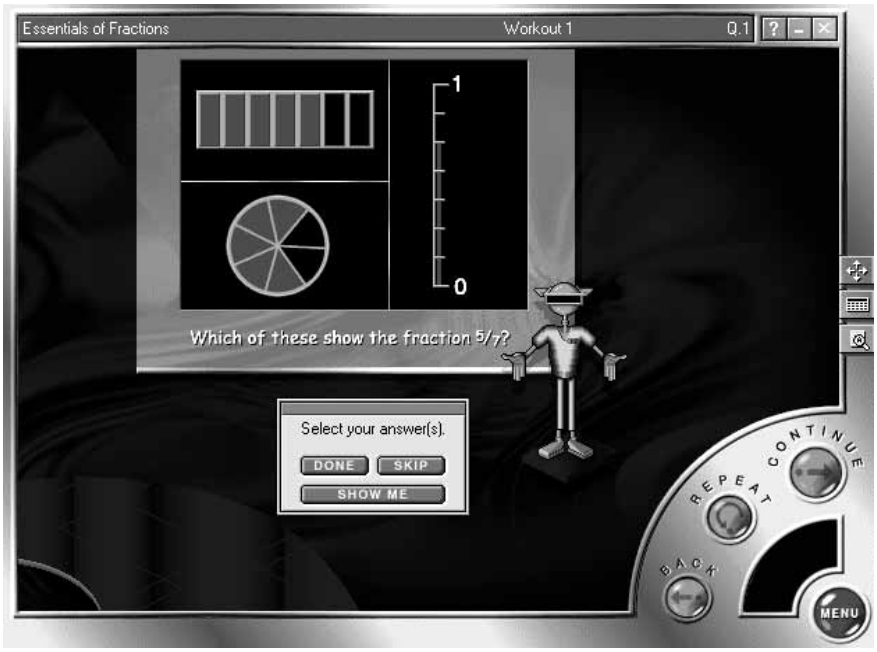


Figure 81 Mastering Skills and Concepts Workout opening screen

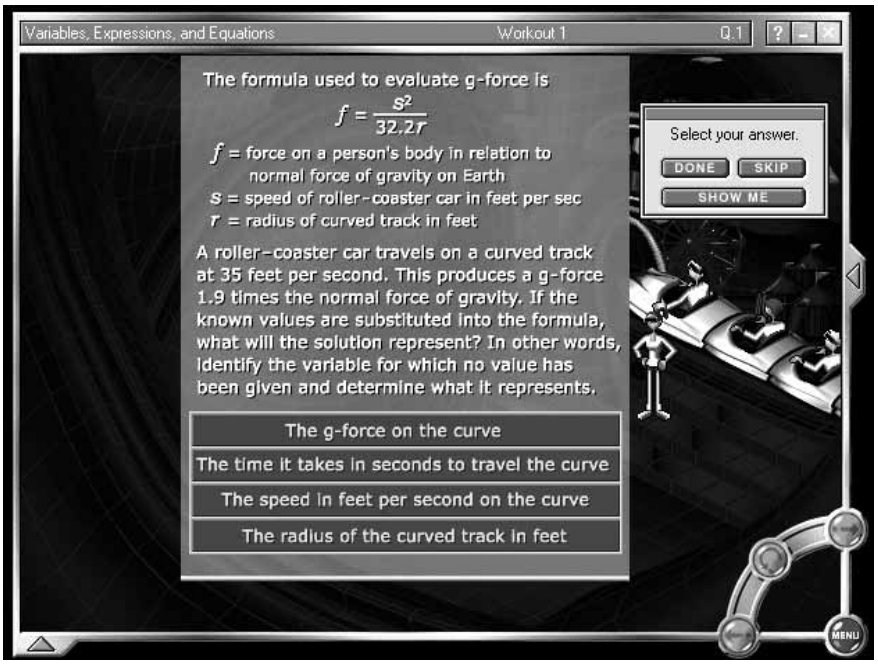

Variables, Expressions, and Equations
Workout 1
0.1
The formula used to evaluate g-force is
$f = \frac{s^2}{32.2r}$
f = force on a person's body in relation to normal force of gravity on Earth
s = speed of roller-coaster car in feet per sec
r = radius of curved track in feet
A roller-coaster car travels on a curved track at 35 feet per second. This produces a g-force 1.9 times the normal force of gravity. If the known values are substituted into the formula, what will the solution represent? In other words, identify the variable for which no value has been given and determine what it represents.
The g-force on the curve
The time it takes in seconds to travel the curve
The speed in feet per second on the curve
The radius of the curved track in feet
Select your answer.
DONE
SKIP
SHOW ME
MENU

Figure 82 Mastering Algebra Workout opening screen

Note: *For details on using these screens, see "User interface" on Section 3.2.4 Page 16.*

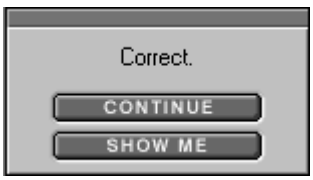
SCREEN DISPLAY The following are the items displayed on the opening screen:

Done Once the student has selected their answer, they click the **Done** button, or click the **Continue** button.

Skip Clicking this button skips the student to the next question without having to answer the existing question.

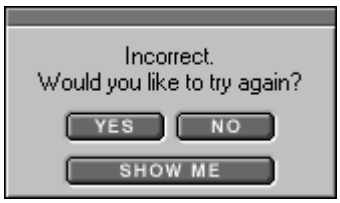
Show Me Clicking this button allows a student to see, in sequence, how the problem is solved.

2 When the **Done** button, or the **Continue** button is clicked, the following message will appear if the answer is correct:



Click the **Continue** button to continue the tutorial, or click the **Show Me** button to see a sequence of screens outlining how the problem is solved.

If the answer is incorrect, the following message will appear:



Click the **Yes** button to retry the question, click the **No** button to continue the tutorial without retrying the question, or click the **Show Me** button to see a sequence of screens outlining how the problem is solved.

SHOW ME

This allows a student to view, in sequence, the problem being solved. This is done through animation and narration. Show Me uses the **PACE** method, which is:

P: Destination MATH restates the **P**roblem.

A: Destination MATH **A**nalyzes the relationship between the elements.

C: Destination MATH works through the steps in **C**alculating the answer.

E: Destination MATH **E**valuates the answer.

When in Show Me students may go back to the chosen workout by clicking the **Return to workout** button on the Mastering Skills and Concepts screen, as illustrated in Figure 83.

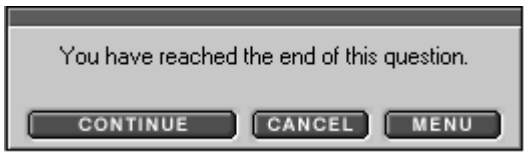
Figure 83 Mastering Skills and Concepts return to workout button

OR

Click the **Workout** button on the Mastering Algebra screen, as illustrated in Figure 84.

Figure 84 Mastering Algebra return to workout button

Note: *When a student has reached the end of a question, the following message may appear:*



*Click the **Continue** button to continue to the next question, click the **Cancel** button to stay on the chosen screen, or click the **Menu** button to return to the main menu.*

3.2.4 User interface

The following are the items contained on the user interface screen:

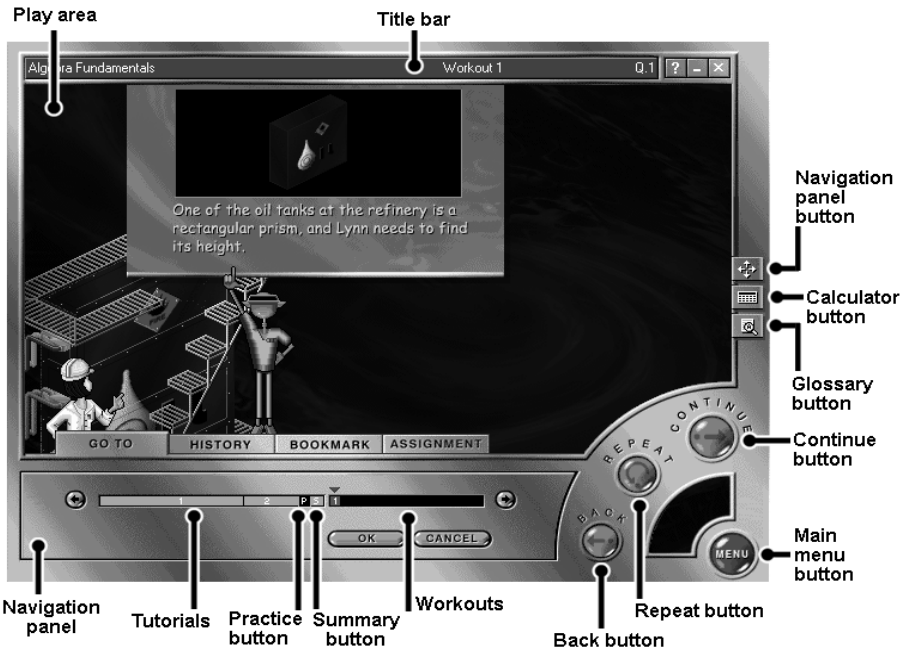


Figure 85 Mastering Skills and Concepts user interface screen

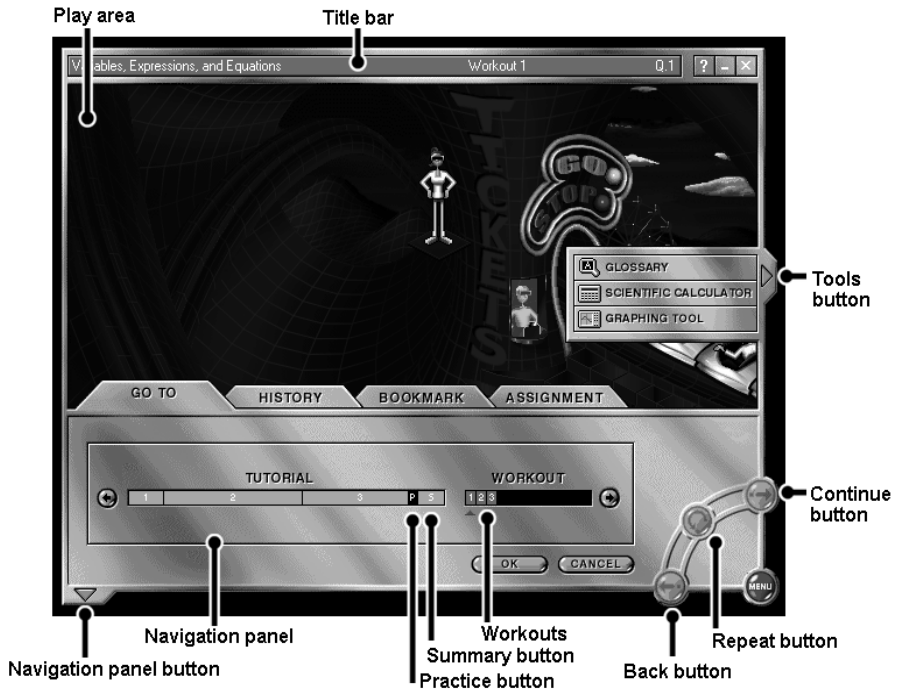


Figure 86 Mastering Algebra user interface screen

Note: *The navigation panel is only accessible by clicking the navigation panel button.*

3.2.4.1 Color code

Four colors are used to denote the different parts of the session that the user is in. Moving from Tutorial to Workout will change the reference to where the user is in the session. The color definitions are:

ORANGE *Tutorial.*

GREEN *Workout type 1 question:* Question based on a basic understanding of one or more learning objectives from the preceding tutorial.

BLUE *Workout type 2 question:* Questions based on the application of one or more learning objectives.

PURPLE *Workout type 3 question:* Challenging questions based on one or more learning objectives that may include extraneous information.

3.2.4.2 Screen display

The following are the items displayed on the screen:

CONTINUE Click this button to continue the session, follow the instructions on the screen, or the narration as the session progresses.

BACK Click this button to go back one step with each click.

REPEAT Click this button to repeat the last step.

MENU Click this button to go to the main menu.

CALCULATOR Click this button to open the scientific calculator, as illustrated in Figure 87. Numbers may be entered by clicking the numbers on the calculator on the screen, or using the keyboard number keys.

Figure 87 Calculator

Click the **Stats** button to launch the stats.

GLOSSARY Click this button to open a glossary of terms, as illustrated in Figure 88.

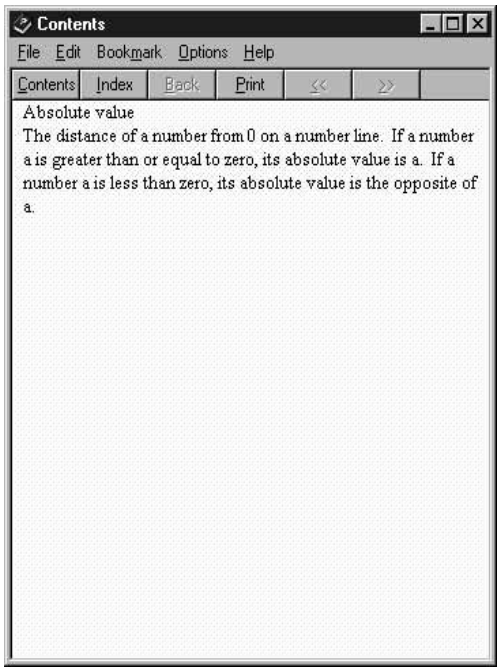

Contents
File Edit Bookmark Options Help
Contents Index Back Print << >>
Absolute value
The distance of a number from 0 on a number line. If a number a is greater than or equal to zero, its absolute value is a. If a number a is less than zero, its absolute value is the opposite of a.

Figure 88 Glossary

GRAPHING TOOL Click this button to open the Graphing tool. *For details of this item see “Launching the Graphing Tool” on Section 4.1.1 Page 3.*

NAVIGATION PANEL Click this button to open the navigation panel. This panel contains:

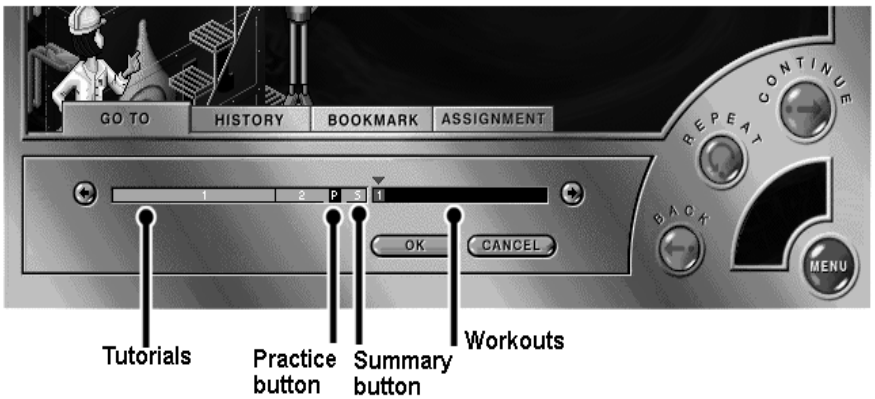


Figure 89 Mastering Skills and Concepts navigation panel

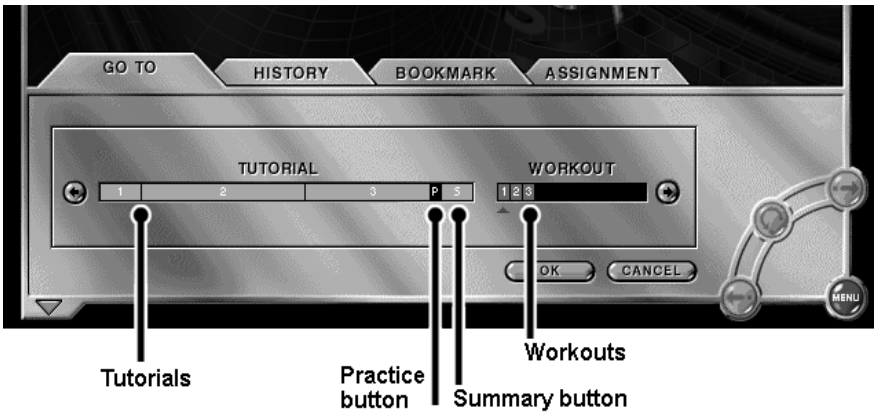


Figure 90 Mastering Algebra navigation panel

Go To The Go To tab allows a student to go to any screen in a tutorial, or any question in a corresponding workout. The red indicator points to the student's current location, the available tutorial screens, a summary of the tutorial, and the difficulty levels of the workouts in the chosen session. The difficulty level is reflected in the colour coding: Type 1, green (easiest level); type 2, blue; and type 3, purple (most difficult level). Click on the tutorial button, and/or the workout questions button of choice, and click the **OK** button to go to the chosen screen. Click Summary (**S)** to see a summary of the given tutorial.

On the Mastering Algebra navigation panel there is an additional button **P** (Practice button). *For details on this button, see "Working the Practice Area" on Section 3.2.2.1 age 8.*

History Click the History tab to view a log of all the sessions accessed during the current sitting.

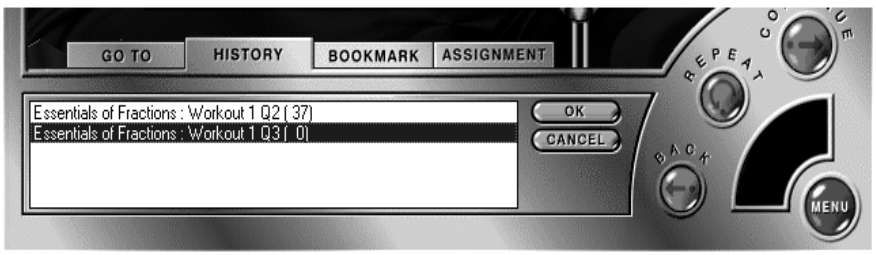


Figure 91 History

Note: *To view any page from the History list, click on the page of choice from the list and click the **OK** button or press the **<Return>** or **<Enter>** key.*

Bookmark Click the Bookmark tab to view a list of screens that the student may wish to return to at a later time. *See "Bookmarks" on Section 3.2.4.3 Page 21.*

Assignment Click the Assignment tab to view a list of assignments that have been created for the student through the Teacher management system. *See “Assignment” on Section 3.2.4.4 P age 23.*

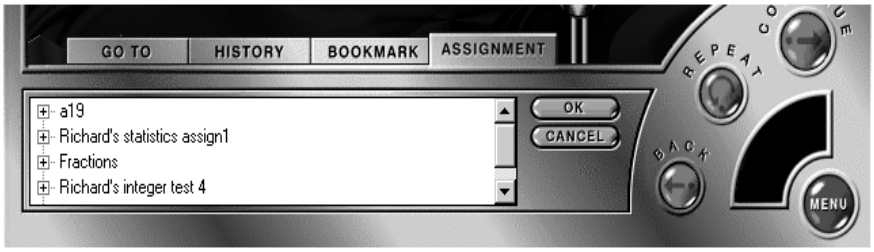


Figure 92 Assignment

Note: *The default tab on the navigation screen is Go To.*

3.2.4.3 Bookmarks

Bookmarks allow the user to mark precise points in the courseware that the user may wish to return to at a later time. Bookmarks may be:

- Selected
- Added
- Removed

SELECTING A BOOKMARK

Use the following procedure to select a bookmark:

1 On the navigation panel, click the bookmark tab. This will open a list of bookmarked screens, as illustrated in Figure 93.

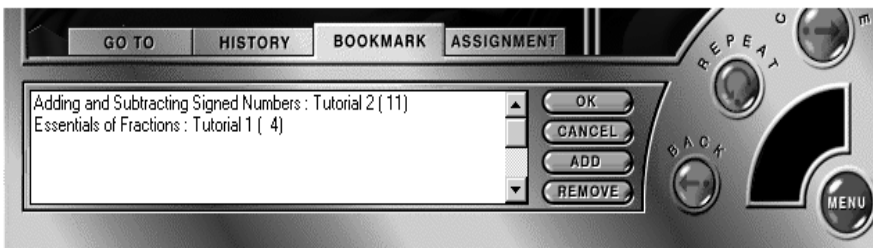


Figure 93 Bookmark

2 Double-click on the screen of your choice from the list.

OR

Click on the screen of your choice from the list, or scroll through the list using the **<Arrow>** keys, click the **OK** button, or press the **<Return>** or **<Enter>** key.

Note: *Bookmarks may also be accessed by clicking the **Bookmark** button on the main menu screen.*

ADDING A BOOKMARK

Use the following procedure to add a bookmark:

1. On the tutorial or workout screen of your choice, click the Navigation panel button.
2. Click the Bookmark tab.
3. Click the **Add** button or press the **<Return>** or **<Enter>** key. This will open the Bookmark label screen, as illustrated in Figure 94.

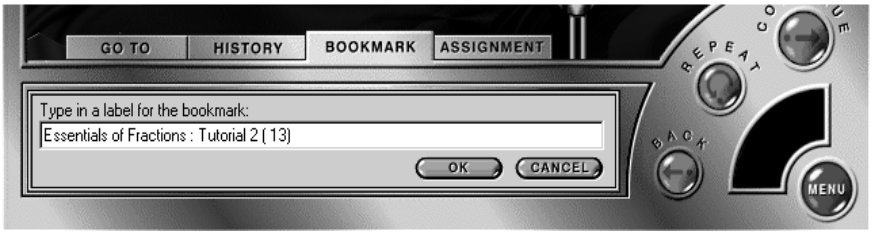


Figure 94 Bookmark label

4. Type in a new name of your choice or accept the name in the Type in a label for the bookmark field.
5. Click the **OK** button or press the **<Return>** or **<Enter>** key. The chosen screen is added to the bookmark list.

Note: *Bookmarks cannot be added to if accessed through the main menu screen.*

REMOVING A BOOKMARK

Use the following procedure to remove a bookmark:

1. On the tutorial or workout screen of your choice, click the Navigation panel button.
2. Click the Bookmark tab.
3. Click on the bookmark of your choice from the list, or scroll through the list using the **<Arrow>** keys.
4. Click the **Remove** button, or press the **<Delete>** key.

Note: *Bookmarks cannot be removed if accessed through the main menu screen.*

3.2.4.4 Assignment

Assignments are lessons made up of components from Destination MAT courses. An assignment can include any component of the software, such as one or more tutorials, workouts, sessions, units, and/or modules.

Use the following procedure to enter an assignment:

1. On the tutorial or workout screen of your choice, click the navigation panel button.
2. Click the Assignment tab.
3. Click the + sign beside the assignment heading. This will open the Set Assignment list, as illustrated in Figure 95.

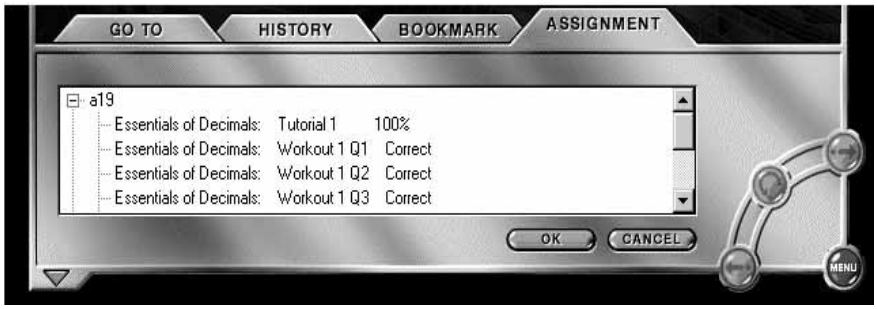


Figure 95 Set Assignment list

4. Click on the assignment of your choice from the list, or scroll through the list using the **<Arrow>** keys.
5. Click the **OK** button to enter the assignment, or click the **Cancel** button to return to the chosen screen.

Note: *Assignments may be entered by clicking the **Assignment** button on the main menu screen.*